Office Action Summary	Application No.	Applicant(s)	
	10/544,259	ALTENSCHOPFER ET AL.	
	Examiner	Art Unit	
	S. Tran	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The 112, first paragraph rejection for failing to comply with the written description requirement of claims 23-25 has been withdrawn in view of applicant's amendment.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 is rejected in the use of the phrase "adapted to provide a pharmacologically effective amount of granisetron after about 2 hours". It is unclear what the phrase is referring to. Is it: 1) a device that does not release the drug until after 2 hours; or 2) a device that provides a T_{max} and/or C_{max} after 2 hours? Is there any drug release before the "2 hours"? What is "a pharmacologically effective amount of granisetron after about 2 hours"? Further clarification is requested.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-26, 28-31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Effing WO 98/53815 A1.

Effing teaches a transdermal drug delivery device or a pressure sensitive skin adhesive device comprising an adhesive layer containing: 1) a copolymer of one or more A monomers and one or more B monomers, and 2) a therapeutically effective amount of granisetron as an active agent (abstract; page 2, lines 14-28; and claims 1 & 11). A monomers include n-butyl, and 2-ethylhexyl acrylates or methacrylates (page 4, 2nd paragraph; and claim 10). Active agent presents in the device ranges from 4-15% (page 5, lines 28-29). Effing further teaches the device has a surface area of about 15 cm^2 to about 60 cm^2 (page 7, lines 20-22). The device comprising granisetron is useful for the treatment of emesis and/or nausea during chemotherapy (abstract; page 1, lines 23-27; page 3, lines 1-5; and page 7, lines 23-29). The device shows stability at storage conditions under 25°C and 40°C after 4 weeks (examples 1 & 2).

It is noted that Effing does not explicitly teaches the property of the device, such as effective amount of granisetron after 2 hours. However, such limitation is inherent because Effing teaches the use of the same materials for the same active agent, namely, a transdermal patch comprising granisetron loaded into an adhesive made of n-butyl, and 2-ethylhexyl acrylates or methacrylates. Products of identical chemical composition cannot have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Claim 22 is rejected under this section because it is a composition claim. The limitation "for the treatment and/or prophylaxis of a condition" is directed to future intended use, and the prior art structure is capable of performing the intended use as recited in the preamble, therefore it meets the claim. See, e.g., *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997). In the present case, Effing teaches the same transdermal patch for the same purpose, namely, transdermal patch of granisetron useful for the treatment of nausea and vomiting.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Effing WO 98/53815 A1, in view of Sanger et al. WO 94/01095 A2.

Effing is relied upon for the reason stated above. Effing does not teach using granisetron for the treatment of condition recited in claim 32.

Sanger teaches the use of 5-HT_3 receptor antagonist for the treatment of visceral pain and migraine (abstract). 5-HT_3 receptor antagonist includes granisetron (claim 8). Thus, it would have been obvious to one of ordinary skill in the art to modify the teaching of Effing for the treatment of migraine to obtain the claimed invention. This is

because Sanger teaches using granisetron for the treatment of migraine and visceral pain is well known in the art.

Response to Arguments

Applicant's arguments filed 04/02/08 have been fully considered but they are not persuasive.

Applicant argues that contrast to the Examiner's assertion, the language at issue is submitted to be clear. One of skill in the art would readily understand the above-quoted language to indicate that the patch can deliver amounts of the active ingredient, granisetron, capable of doing that which granisetron is known to do, e.g., prevent nausea and vomiting in a subject undergoing chemotherapy, within 2 hours of being administered to the patient; i.e., invention patches can be administered to a patient, and within 2 hours, chemotherapy can start. Consistent with this discussion, the Examiner's attention is directed to paragraph [0035] of Applicants' specification, which indicates that "the patches of the present invention can already begin to show efficacy by about 2 hours..."

However, while the examiner agrees to applicant's remarks, it appears that the above remarks are contradicting to the limitation in claim 9 for the following reason: applicant clearly states that "*one of skill in the art would readily understand the quoted language to indicate that the patch can deliver amounts of the active ingredient, granisetron, capable of doing that which granisetron is known to do, e.g., prevent nausea and vomiting in a subject undergoing chemotherapy, **within** 2 hours of being*

administered to the patient; i.e., invention patches can be administered to a patient, and ***within*** *2 hours, chemotherapy can start. Consistent with this discussion, the Examiner's attention is directed to paragraph [0035] of Applicants' specification, which indicates that the patches of the present invention can already begin to show efficacy* by about *2 hours...".* The limitation "*within* 2 hours" in applicant's remarks is known in the art to be different from the limitation "*after* 2 hours" in the present claim. Accordingly, the 112, second paragraph rejection of claim 9 is maintained.

Applicant argues that the present distinguishes over Effing by requiring an adhesive patch suitable for the transdennal administration of granisetron, wherein the adhesive is an acrylic adhesive containing non-acidic hydroxyl moieties, a physiologically effective amount of granisetron being loaded in the adhesive. Therefore, invention adhesive patches are required to contain hydroxyl moieties, but not just any hydroxyl moieties--non-acidic hydroxyl moieties. In contrast to the present claims, which are directed specifically to adhesive patches containing granisetron, Effing is directed to adhesive patches containing either tropisetron or granisetron--suggesting that these two compounds are substantially similar both structurally and functionally (see, for example, page 1, line 23-page 2, line 2 of Effing, which suggests the interchangeability of these compounds). In view of Effing's teachings, one of skill in the art would expect that observations made with respect to tropisetron (the only compound with which Effing conducted experiments) would be equally applicable to granisetron.

However, in response to applicant's arguments, it is noted that Effing teaches a transdermal patch suitable for the delivery of both, tropisetron or granisetron (see

abstract; and claim 1). Further, the use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain. *In re Heck*, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). Accordingly, the teaching of Effing clearly includes the claimed compound, namely, granisetron.

Applicant argues that the present invention since Effing makes it clear that the only B monomer disclosed therein that contains a free hydroxyl group (2-hydroxyethylacrylate, HEA) is disfavored. See, for example, EXAMPLE 7 at page 13 of Effing, which indicates that an adhesive prepared with HEA as monomer B suffered from an unacceptable decrease in drug content (more than 10% decrease) within four weeks of storage. This stands in stark contrast to the remaining examples which evaluate the stability of the active drug in the transdermal patch. See, for example, EXAMPLE 1 and EXAMPLE 2 (both at page 11 of Effing), which indicate that lull stability is retained at both *25°C* and 40°C for at least four weeks. Thus, one of skill in the art would have no motivation to use a hydroxyl-containing monomer such as HEA in the preparation of an adhesive patch containing granisetron.

However, the examiner is unable to locate the teaching in Effing that suggests to one of the ordinary skill in the art not to use the B monomer that contains a free hydroxyl group (2-hydroxyethylacrylate, HEA). In contrast, Effing at page 3, line 14, teaches B monomer includes HEA. Applicant directs the Examiner's attention to example 7 in Effing for the teaching of the storage stability, it is noted that example 7 is

directed to a different compound, e.g., tropisetron. Further, a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, *including nonpreferred embodiments*. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). Moreover, it is noted that the claimed adhesive patch is not entirely composed of HEA, per se. This is evident by claims 7 and 8 of the present invention, which recite a patch that "containing a *major* amount of a primary acrylate monomer" selected from either 2-ethylhexyl acrylate or butyl acrylate. These polymers do not contain non-acidic hydroxyl moieties. Accordingly, the examiner is unable to determine if the present invention exhibits unexpectedly and/or unusual storage stable result over that of Effing.

For the above reasons, the 102(b) rejection over Effing is maintained.

Applicant argues that reliance on Sanger is unable to cure the deficiencies of Effing, since Sanger adds nothign to the consideration of what a transdermal patch for the delivery of tranisetron should look like.

In response to applicant's argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Sanger is relied upon solely for the teaching that 5-HT_3 receptor antagonist such as granisetron is known for the treatment of visceral pain and migraine (abstract).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Tran whose telephone number is (571) 272-0606. The examiner can normally be reached on M-F 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. Tran/
Primary Examiner
Art Unit 1618